

Fermilab Accelerator Advisory Committee
May 10-12, 2005

Charge (Draft Rev. 4)

Fermilab has received a proposal for the construction and operation of a Superconducting Module Test Facility at Fermilab. The associated development and testing program would support the International Linear Collider and Proton Driver R&D programs, both of direct interest to Fermilab, and other superconducting rf based programs of potential interest within the DOE and NSF. Fermilab is currently evaluating this proposal with a goal of forwarding to the funding agencies a specific proposal for support of the ILC and Proton Driver programs. Such a proposal needs to reflect the interests and goals of Fermilab, the collaborating institutions, the ILC Global Design Effort, and the agencies. The May 2005 AAC meeting will concentrate on evaluation of the goals, scope, and planning for the ILC and Proton Driver programs within the SMTF context.

The Fermilab Accelerator Advisory Committee is asked to review, comment on, and offer recommendations as appropriate with particular attention in the following areas:

1. Review the goals of the ILC component of SMTF. As presented do the elements form the basis of a program which will allow the U.S. to establish the technical capabilities in SCRF required to support a bid to host the ILC? Please also consider the following areas and offer comment as appropriate:
 - The “deliverables” that the ILC GDE can expect to receive from this program and their projected influence on the ILC design and/or preparations for construction.
 - The strategic approach outlined for cryomodule production and testing in view of the existing capabilities within the national laboratories and universities, and the adequacy of the proposed supporting infrastructure and resources.
 - The relationship between the SMTF plan and a more comprehensive U.S. industrialization plan in support of ILC construction.
 - The role of the photoinjector and its upgrades within the ILC program.
2. Review the goals of the Proton Driver component of SMTF. Identify elements that form the core of a program which would allow Fermilab to establish the technical basis required for a construction start near the end of the decade. Comment on the strategic approach outlined and the adequacy of the proposed supporting infrastructure and

resources.

As usual the committee is invited to issue comments or suggestions on any aspect of the programs discussed beyond those specifically included in this charge. It is requested that a concise report responsive to this charge be forwarded to the Fermilab Director by June 17, 2005. Thank you.